

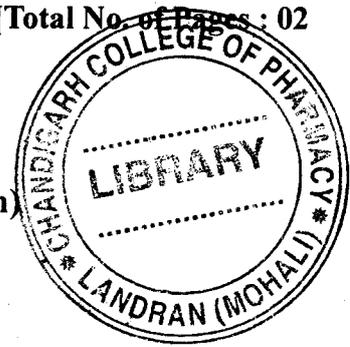
Roll No. ....

Total No. of Questions : 10]

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**B. Pharmacy (Sem. - 1<sup>st</sup>)**  
**PHARMACEUTICAL ANALYSIS - I**  
**SUBJECT CODE : PHM - 1.1.1 (2k9 Batch)**  
**Paper ID : [D0145]**



[Note : Please fill subject code and paper ID on OMR]

**Time : 03 Hours**

**Maximum Marks : 80**

**Instruction to Candidates:**

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.
- 3) Attempt any **Three** questions from Section - C.

**Section - A**

**Q1)**

**(15 × 2 = 30)**

- a) Standard deviation.
- b) Student t-test.
- c) Conjugate acid and conjugate base.
- d) Precision.
- e) Self indicator.
- f) Blank titration.
- g) Co-precipitation.
- h) Digestion.
- i) Salt hydrolysis.
- j) Titration curve.
- k) Oxidation number.
- l) Standard reduction potential.
- m) Colloids solution.
- n) Acidimetry.
- o) Buffer solution.

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**P.T.O.**

**Section - B**

**(4 × 5 = 20)**

- Q2)** Discuss various theories of neutralization indicator.
- Q3)** Discuss titration curve of weak acid with weak base.
- Q4)** Describe Idometric and Iodimetric assays with suitable examples.
- Q5)** What is the critical role played by common ion effect in gravimetric analysis? Explain.
- Q6)** Explain role of solubility product in precipitation reactions governing argentimetric titration methods.

**Section - C**

**(3 × 10 = 30)**

- Q7)** What are the two major types of error encountered in pharmaceutical analysis? Explain with suitable examples.
- Q8)** What is Volhard's method of argentimetric titration? Explain it with the help of equation and the precautions involved in it.
- Q9)** Describe measurement of electrode potential and its application in determining equilibrium constant of redox reaction.
- Q10)** Write short notes on :
- (a) Organic precipitant.
  - (b) Titration of polyprotic acid.

